Panasonic

INSTALLATION INSTRUCTIONS

– Solenoid Valve Kit –

for 3-Way ECO-i System

For safety installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning.
- Follow each installation or repair step exactly as shown.
- Observe all local, state, and national electrical codes.
- Pay close attention to all warning and caution notices given in this manual.

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

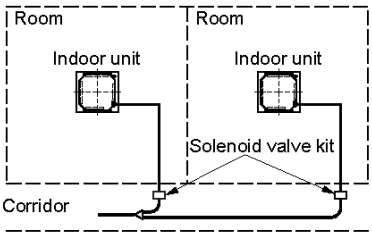
1. Accessories

Part Name	Figure	Q'ty	Remarks
Washer		2	For hanging bolts
Hanging hook		1	Used to hang the Solenoid Valve Kit
M4 screw (L=15/32")		4	For hanging hook
Tapping screw (L=5/16")		4	For Solenoid Valve Relay Kit
Wire holder		1	For Solenoid Valve Relay Kit wiring
3-Way connect wire (6.5ft.)		1	
ACC-3WAY-AAB		1	Solenoid Valve Relay Kit

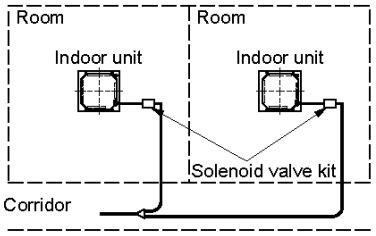
2. Positioning for Installation

- The solenoid valve kit produces some refrigerant noise. If it is to be installed in a quiet place such as a hospital, library or hotel, it is recommended that the solenoid valve kit be installed in the ceiling of a corridor, etc. apart from the room.

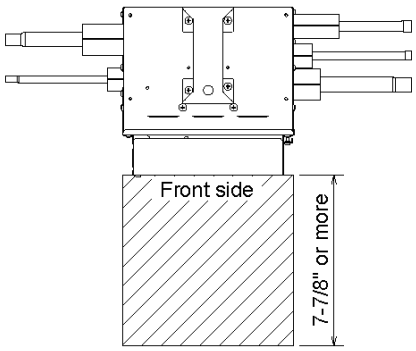
Recommended installation



Avoid



- Be sure to secure the solenoid valve kit to the structure and the hanging bolts, etc. using the top or side holes of the hanging hooks. Do not place the solenoid valve kit directly on the ceiling surface. When installing the solenoid valve kit, **remember to install it with the top surface facing upward.** (See the figure shown in the subsection "How to use the fittings" in " 3. Valve Dimensions and Hanging Method.")
- Provide a service space of 7-7/8" or more in front of the installing site.
- **Never conduct drilling or welding on the sheet metal.** Place the solenoid valve kit so that it does not hinder draining.
- Do not cover air holes.

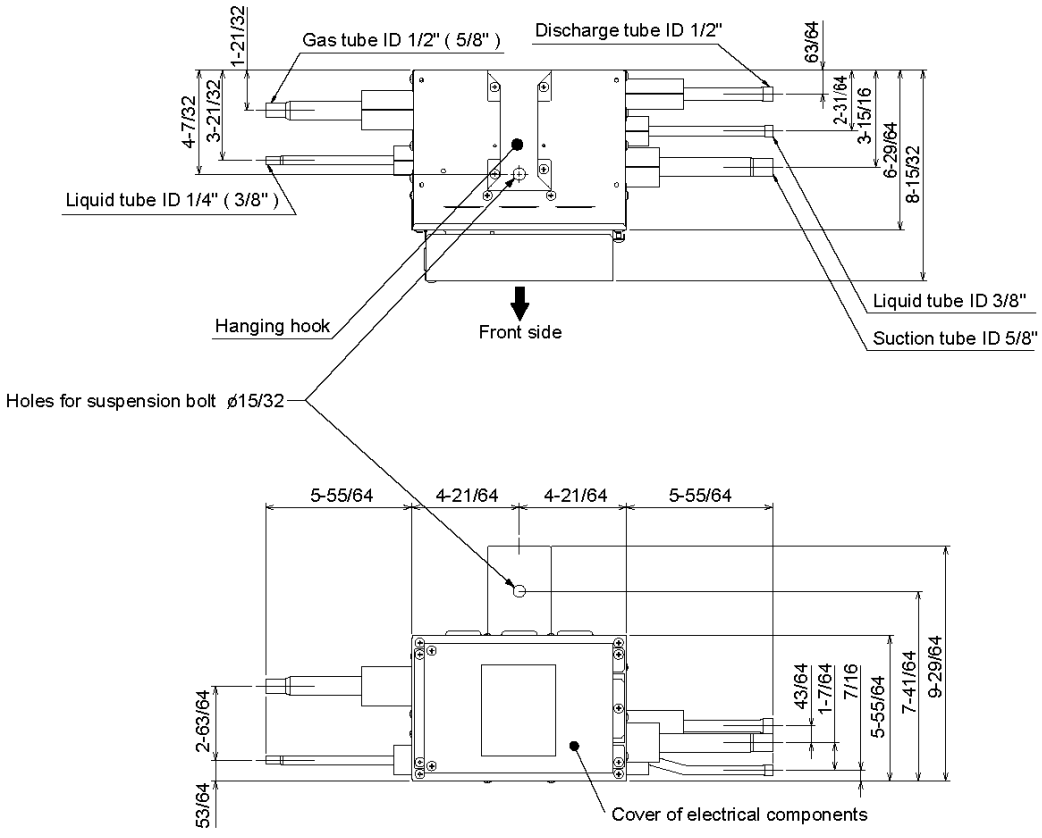


Service space

3. Valve Dimensions and Hanging Method

- There are 2 types of solenoid valve kits: type 56 and type 160. The corresponding indoor unit model capacities are shown in the table at right.

Solenoid Valve Kit	Indoor Unit Capacity
CZ-P56HR1U	7 -18 Type
CZ-P160HR1U	24 - 48 Type

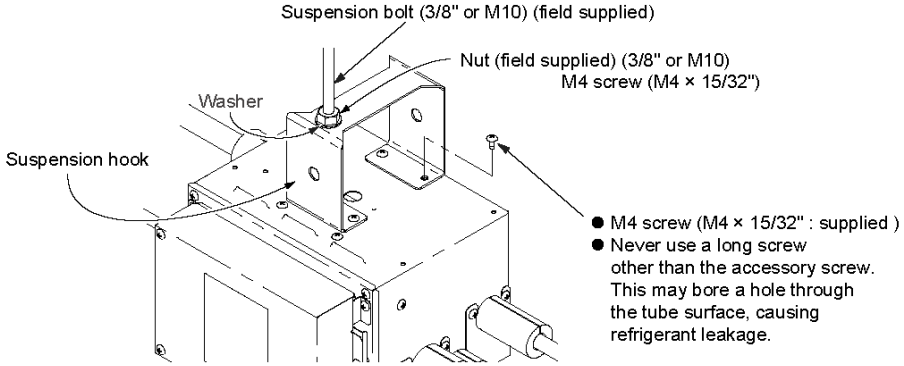


unit : in.

Note

This figure shows the unit with suspension fittings attached.

How to use the fittings

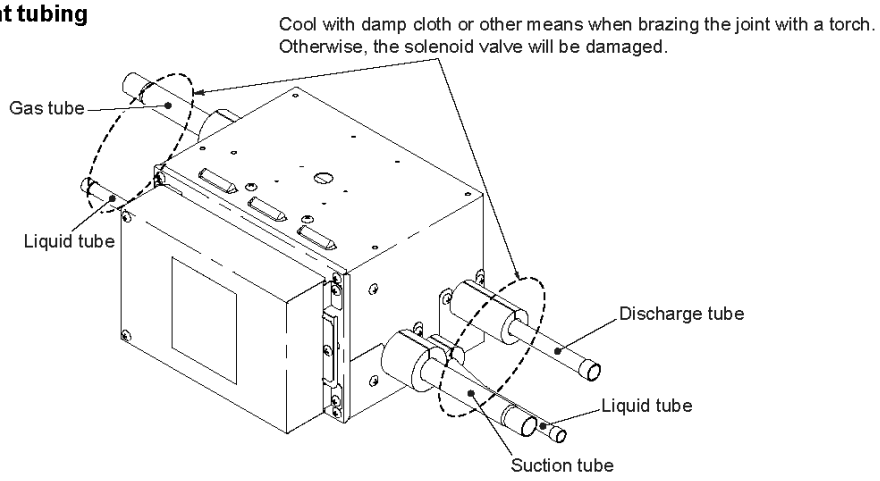

Suspension bolt (3/8" or M10) (field supplied)
Nut (field supplied) (3/8" or M10)
M4 screw (M4 × 15/32")
Washer
Suspension hook
● M4 screw (M4 × 15/32" : supplied)
● Never use a long screw other than the accessory screw. This may bore a hole through the tube surface, causing refrigerant leakage.

Install the hanging hook with supplied 4 screws (M4 X 15/32") taking care of the positioning.

CAUTION Wrong positioning will become unfitted center of gravity position, causing injuries or product damage.

4. Wiring, Tubing, and Heat Insulation

1. Refrigerant tubing


Cool with damp cloth or other means when brazing the joint with a torch.
Otherwise, the solenoid valve will be damaged.
Gas tube
Liquid tube
Discharge tube
Liquid tube
Suction tube

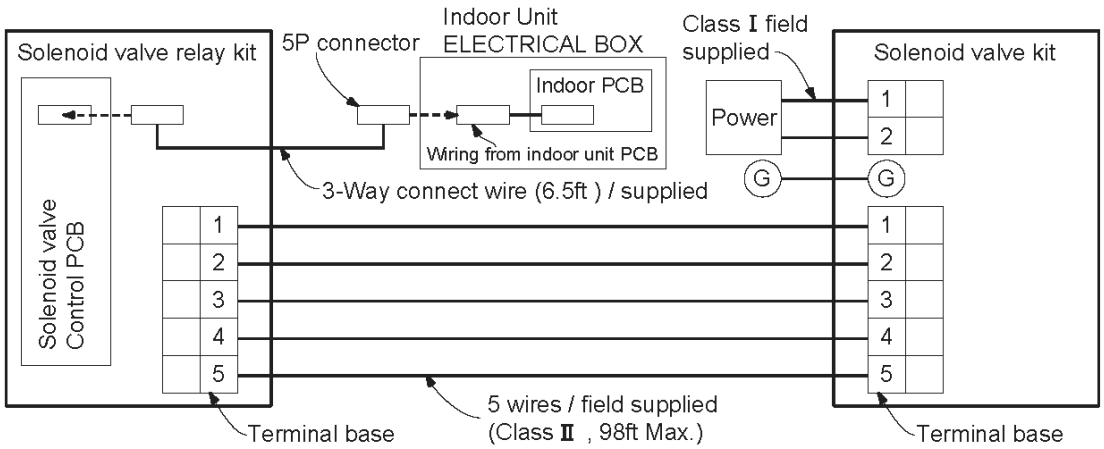
Note

- When brazing, be sure to perform nitrogen replacement inside the tube so that oxidation coating does not form inside the tube. Then stop performing when nitrogen replacement is completed. The solenoid valve, however, will be damaged if nitrogen is applied during while brazing.
- Heat sensitive components, protect from flame and heat conduction.
- Comply with all Local Code Requirements.
- Clean base metals throughly.
- Use proper ventilation to carry fumes away from the work area.
- Use a high quality silver based solder of at least 15% silver.
- Heat the base materials broadly and uniformly.
- Take precautions not to overheat the device which could damage sensitive internal components.
- Insure compliance with all local codes!

2. Heat Insulation

- Be sure to insulate the tubing after finishing leakage inspection.
- Wrap insulators (field supplied) having a thickness of 25/64" or more with the heat resistance of 248**°F** or more around the discharge tubes and gas tubes, and 176**°F** or more around the suction tubes and liquid tubes.
- Wrap around the each tube not to make gaps between the thermal insulation.
- Failure to conduct shielding gaps and thermal insulation will cause water leakage.

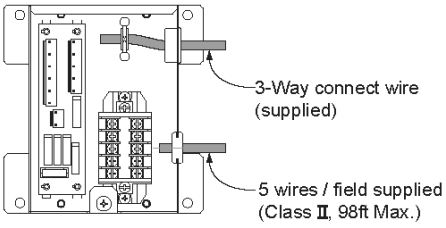
3. Wiring

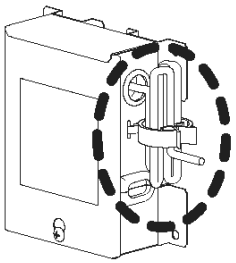


It requires that the Class Ⅰ wire and Class Ⅱ wire should be separated.

4. Procedure :

1. Connect the power supply wire to the solenoid valve kit, using the Class Ⅰ wire.
2. Connect the solenoid valve kit to the solenoid valve relay kit, using the Class Ⅱ wire.
3. Connect the solenoid valve relay kit to the indoor unit, using the supplied connect wire.
4. The left-over wires connected to the solenoid valve relay kit should be tied up in a bundle of wires by the supplied wire holder not to leave the wires loose as shown in the diagram at right.





5. Installation to the Solenoid Valve Relay Kit

Install the solenoid valve relay kit into the indoor unit and fix it using a Philips-head screwdriver. See the diagram in the section of "6. Electrical Wiring Diagrams".

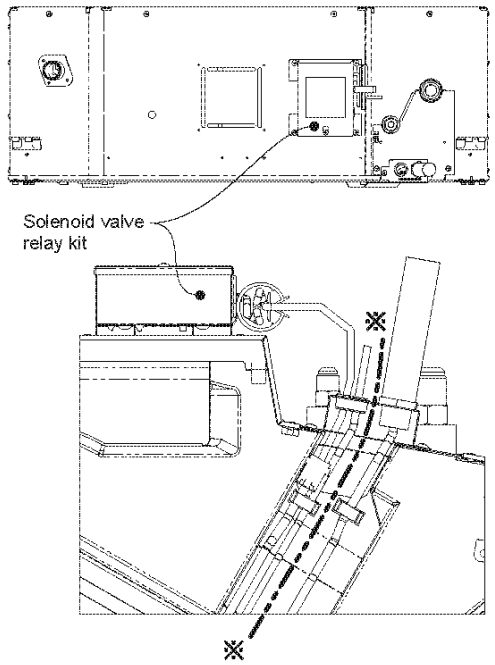
WARNING

- Do not install outside the building and the area where the water is splashed. Failure to do so could result in product or property damage.
- Do not handle or touch the unit with wet hands. Failure to do so could result in electric shock.

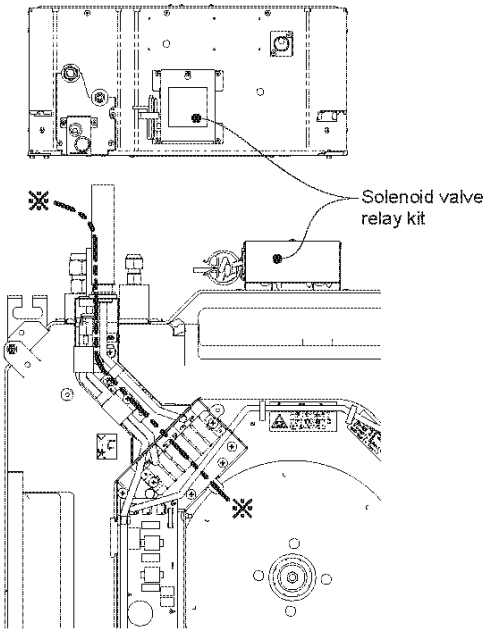
6. Electrical Wiring Diagrams

※ Make sure that the power supply wiring, communication wiring and 3-way wiring will not be crossed each other.

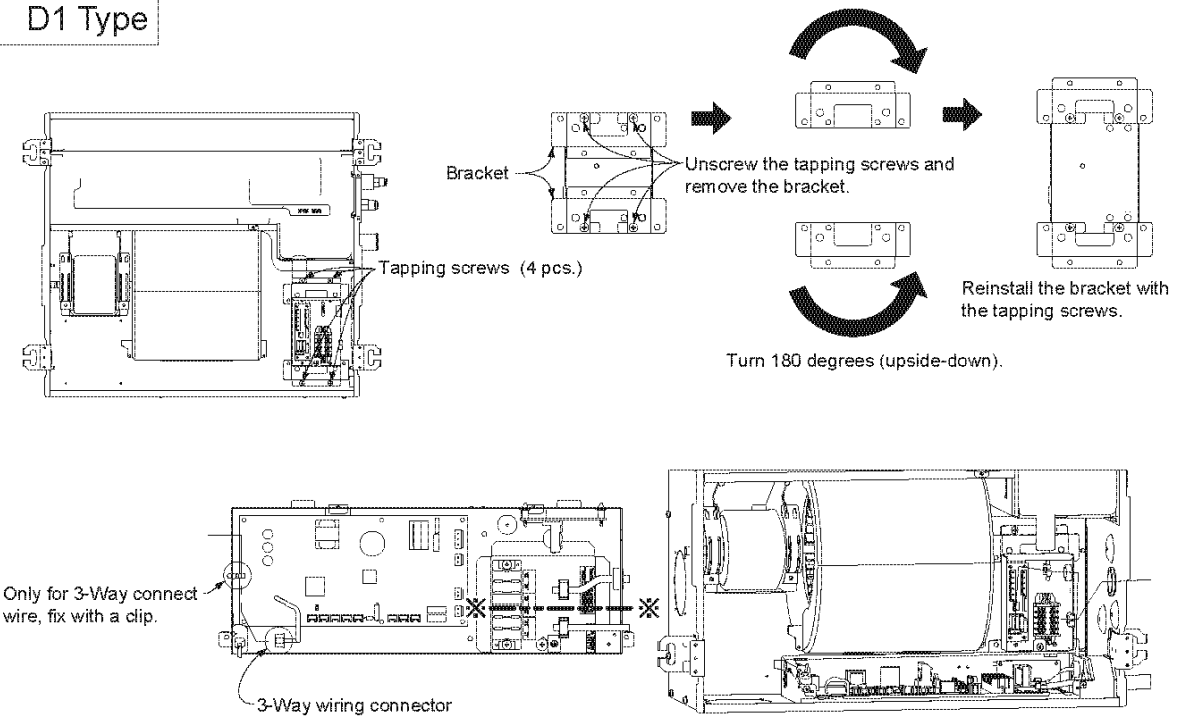
U1 Type



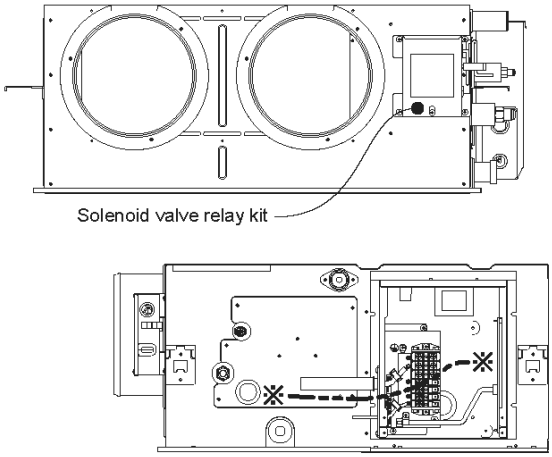
Y1 Type



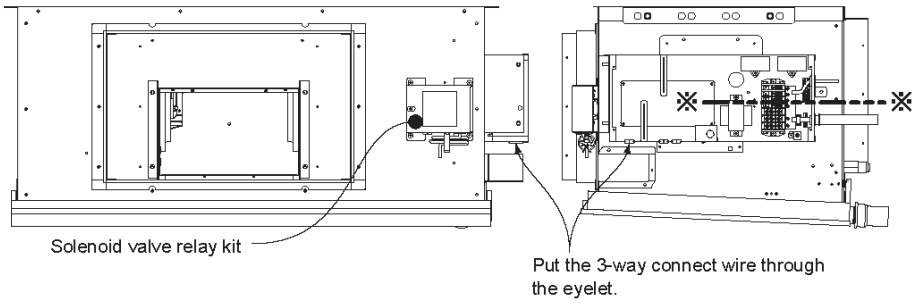
D1 Type



F1 Type



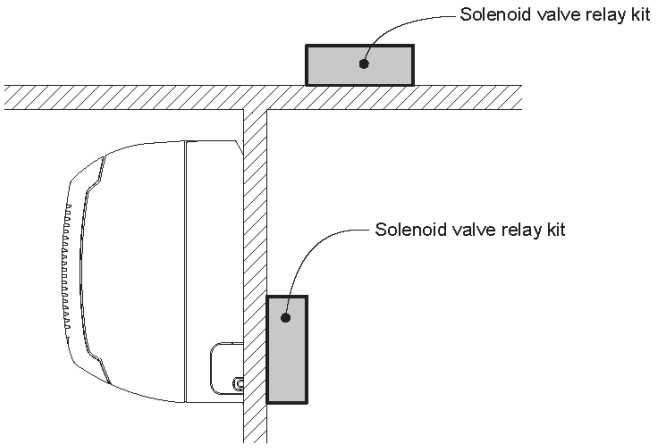
E1 Type



K1 Type

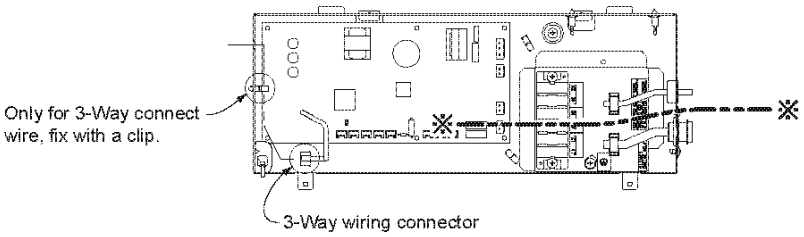
For wall-mount type (K1 type), install the solenoid valve relay kit on the wall.

Important:
Installation behind the wall or ceiling is required that the maintenance should become capable.

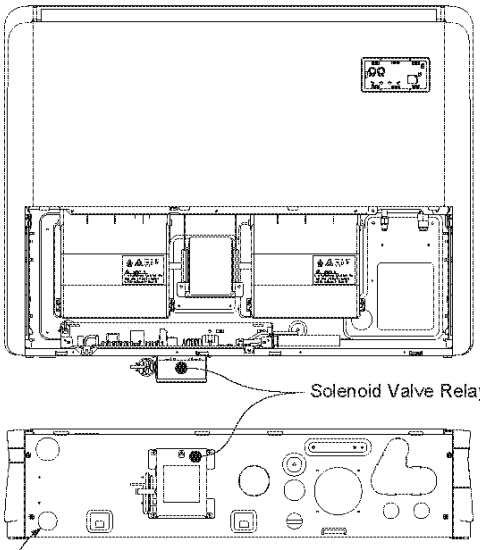


T1 Type

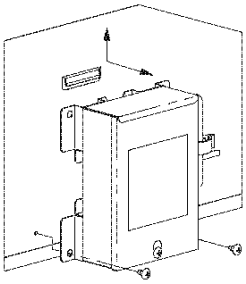
Common use

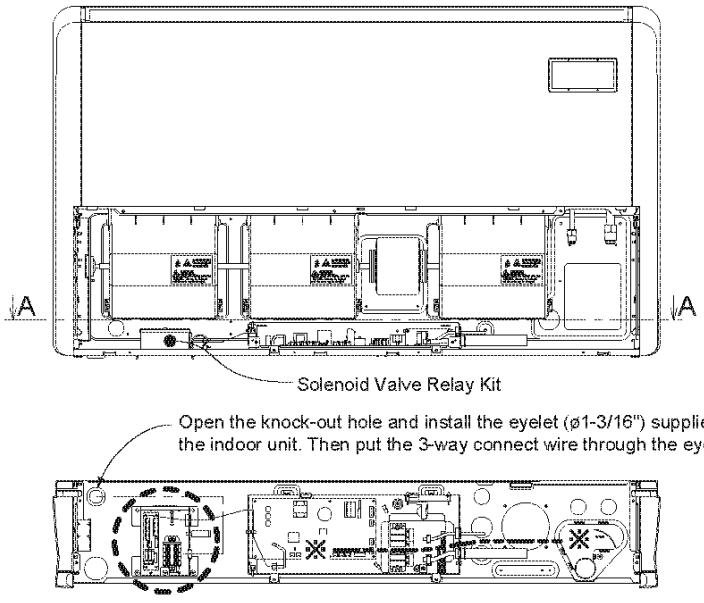


Model : S-12MT1U6/ S-18MT1U6


Solenoid Valve Relay Kit
Open the knock-out hole and install the eyelet (ø1-3/16") supplied with the indoor unit. Then put the 3-way connect wire through the eyelet.

Model : S-24MT1U6

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